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## AMERICAN PHYSIOLOGICAL SOCIETY

THE American Physiological Society will hold its twenty-first annual meeting in Baltimore during convocation week, beginning December 29, 1908. Joint sessions will be held with the American Society of Biological Chemists and with Section K—Physiology and Experimental Medicine—of the American Association for the Advancement of Science. The place of meeting will be the Lecture Hall, second floor, of the Johns Hopkins Medical School Building (Washington and East Monument Streets).

REID HUNT,  
*Secretary*

25TH AND E STS., N. W.,  
WASHINGTON, D. C.

## THE AMERICAN NATURE-STUDY SOCIETY

ONE session of the meeting at Baltimore will be devoted to a discussion of "The Relation of Nature-study and Elementary Agriculture in Rural Schools," and one session will be devoted to "Nature-study in its Relation to High School Biology." It is expected that a third session will be made up of general papers. The dates of these sessions will be arranged, as far as possible, to avoid conflict with other meetings.

## THE HAYDEN MEMORIAL MEDAL

THE Academy of Natural Sciences of Philadelphia has conferred the Hayden memorial gold medal for 1908 on John Mason Clarke, the state geologist of New York, in recognition of his distinguished services to geological science.

The academy accepted in 1888 from Mrs. Emma W. Hayden an endowment of a memorial to her husband, Dr. Ferdinand V. Hayden, who was for several years director of the Geological and Geographical Survey of the Territories, remaining one of the four principal geologists of the United States Geological Survey from its organization, in 1879, until his death. Provision was at first made to confer a bronze medal and the balance of interest on the fund annually as a recognition of the best publication, exploration,

discovery or research in the sciences of geology and paleontology.

The bronze medal was awarded annually until 1899, when the deed of trust was modified so as to provide for the conferring of a gold medal once every three years.

The recipients of the award have been as follows:

- 1890. James Hall, state geologist of New York.
- 1891. Edward D. Cope, distinguished paleontologist.
- 1892. Edward Suess, of Vienna, author of "Das Antlitz der Erde."
- 1893. Thomas Huxley, the distinguished biologist and paleontologist.
- 1894. Gabriel Auguste Daubrée, of the Institute of France.
- 1895. Karl A. von Zittel, of Munich, author of the monumental "Handbuch der Paleontologie."
- 1896. Giovanni Capellini, of Bologna, president of the Royal Geological Survey of Italy.
- 1897. A. Karpinski, of St. Petersburg, director of the Geological Survey of Russia.
- 1898. Otto Martin Torell, chief of the Geological Survey of Sweden.
- 1899. Gilles J. G. Denalque, secretary of the Geological Society of Belgium.
- 1902. Archibald Geikie, director of the Geological Survey of Great Britain.
- 1905. Charles Doolittle Walcott, director of the United States Geological Survey, and now secretary of the Smithsonian Institution.

In the opinion of the committee on the award Mr. Clarke's contributions to geology, especially his "Early Devonian History of New York and Eastern North America," rank him with the others who have received the recognition.

## SCIENTIFIC NOTES AND NEWS

PROFESSOR W. W. CAMPBELL, director of the Lick Observatory, has been appointed lecturer for next year on the Silliman foundation at Yale University.

ON the occasion of King Edward's birthday, the honor of knighthood was conferred on Dr. Jonathan Hutchinson, Hunterian professor at the Royal College of Surgeons; Dr. Thomas Oliver, professor of physiology at

Durham; and Dr. J. J. Thomson, Cavendish professor of experimental physics at Cambridge. The K.C.B. has been conferred on Dr. Donald Macalister, principal of Glasgow University, and formerly lecturer on medicine at the University of Cambridge. Dr. Alfred Russel Wallace has received the Order of Merit.

THE freedom of West Ham has been privately conferred upon Lord Lister at his house in the country, as he was prevented by his state of health from receiving the distinction in public. Lord Lister was born at Upton, Essex, in the borough of West Ham.

SIR DANIEL MORRIS has been elected an honorary life fellow of the Royal Horticultural Society, London.

PROFESSORS HENRY M. HOWE and William Campbell, of the department of metallurgy of the Schools of Mines, Engineering and Chemistry of Columbia University, have been appointed by the American Society for Testing Materials as their representatives on the international committee dealing with the problem of uniform nomenclature of iron and steel. Professor Howe is chairman of this committee.

PROFESSOR SOLON I. BAILEY, of the Harvard College Observatory, who has had charge of the Arequipa Observatory, in Peru, has gone to South Africa, where he has established an observing station about four hundred miles east of Cape Town.

DR. J. E. KIRKWOOD, formerly in charge of botany at Syracuse University and recently associated with Professor F. E. Lloyd in Guayule investigations at Mazapil, Mexico, has taken up his residence at Tucson, Arizona, where he will complete some investigations on desert problems at the Desert Botanical Laboratory, and where he may be addressed.

MR. ABBOTT H. THAYER, the American artist and naturalist, has been giving at the Zoological Gardens, London, demonstrations of the oblitative effect of the patterns where the coloration is supposed to be conspicuous.

DR. E. B. POULTON, Hope professor of zoology in Oxford University, will give the annual

address before the Entomological Society of America at its Baltimore meeting, on Thursday evening of convocation week, December 31. The title of the address will be "Mimicry in the Butterflies of North America."

THE Founder's Day address at the twelfth anniversary of the Thomas S. Clarkson Memorial School of Technology will be delivered on December 1 by Dr. S. W. Stratton, director of the Bureau of Standards.

MR. ROBERT MOND, of London, lectured at the College of the City of New York, on Tuesday, November 10, on "The Mond Nickel Process and the Carbonyls of Iron and Cobalt."

PROFESSOR W. B. CANNON has been elected president, Dr. J. L. Bremer, secretary, and Professor F. B. Mallory, treasurer, of the Boston Society of Medical Sciences.

THE Academy of Natural Sciences of Philadelphia has appointed Dr. Arthur Erwin Brown as its delegate to the University of Cambridge Darwin memorial celebration. Although Darwin became a member of the Dresden Academy in 1857, before the publication of the "Origin of Species," it is probable that to the Philadelphia Academy belongs the honor of having been the first foreign society to accord his great work official recognition. He was elected a correspondent on March 27, 1860, upon the nomination of Isaac C. Lea and Joseph Leidy. To his election Darwin refers appreciatively in a letter to Lyell dated May 8 of that year.

AT the opening meeting of the Linnean Society, held on November 2 at Burlington House, the president, Dr. Dukinfield Scott, announced that the council had arranged to present a silver copy of the Darwin-Wallace medal to the British Museum. He handed the gift to Mr. H. A. Grueber, keeper of the coins and medals, who, on behalf of the trustees, acknowledged it. Professor Dendy, F.R.S., the zoological secretary, exhibited the memorial medal founded by the New Zealand Institute in honor of the late Captain Hutton, F.R.S., who did so much to promote the study of natural science in the dominion.

THE memorial tablet unveiled to the late Major James Carroll at the University of Maryland on October 11 bears the following inscription:

JAMES CARROLL,

M.D., 1891, and LL.D., 1907.

Major and Surgeon, U. S. Army.

Born in Woolwich, England, June 5, 1854.

Died in Washington, D. C., Sept. 16, 1907.

As a member of the Army Commission, which succeeded in demonstrating the mode of conveyance of yellow fever, he became an eminent contributor to science by his investigation, and a heroic benefactor of his country and of mankind by voluntary submission to the bite of an infected mosquito, whereby he suffered from a severe attack of yellow fever produced for the first time by experiment.

Greater love hath no man than this, that a man lay down his life for his friends.

Erected by the regents of the University of Maryland.

A COMMITTEE has been formed to erect a monument to Dr. Cornil, former professor of pathological anatomy at Paris. It will be placed in his birthplace, Cusset, near Vichy.

DR. JAMES FLETCHER, of the Experimental Farm, Ottawa, Canada, well known for his important contributions to entomology, has died at the age of fifty-six years.

MR. W. S. HARWOOD, the talented author and magazine writer, died at his home in Los Gatos, California, on November 3. Mr. Harwood was born in Charles City, Iowa, 51 years ago. Among his writings are "New Creations in Plant Life, or Life and Works of Luther Burbank," "The New Earth," and his latest work, "The Life and Letters of Austin Craig," now in the press of the Fleming H. Revell Company.

As the result of a surgical operation, performed too late to save his life, Alvah Augustus Eaton, well known to botanists as a faithful student of the genera *Isoetes* and *Equisetum*, and as a close observer of the ferns, died at his home in North Easton, Mass., on the twenty-ninth day of September, 1908. Mr. Eaton was a skillful plant collector and in three excursions to Florida in behalf of the Ames Botanical Laboratory made many interesting discoveries of impor-

tance to American botany. During the last five years of his life he was actively engaged in work on the Orchidaceæ. His herbarium of *Isoetes* is, at his request, to be deposited among the collections of the Missouri Botanical Garden at St. Louis, Mo.

M. ALFRED DITTE, the distinguished French chemist, has died at the age of sixty-five years.

MR. ANDREW GRAHAM, from 1864 to 1903, first assistant at the Cambridge Observatory, known especially for his work on the Cambridge star catalogue published in 1897, has died at the age of ninety-three years.

SIR HENRY ALFRED PITMAN, registrar of the College of Physicians, London, from 1858 to 1880, and formerly physician at St. George's Hospital, died on November 6. He received his bachelor's degree at Cambridge University in 1831, and celebrated last July his hundredth birthday.

WE regret also to record the deaths of Dr. John M. Thome, director of the Cordova Observatory since the retirement of Dr. Gould; of Dr. Cecil G. Dolmage, known for his writings on astronomy; and of Mr. Archibald J. Little, who did valuable geographical work in the interior of Asia.

It is announced that the cost of the new library building for the Medical and Chirurgical Faculty of Maryland will be \$88,000, and of this about \$63,000 has already been subscribed.

MR. W. K. DAVEY has given the sum of £1,000 towards the initial expenses of the Australian Institute of Tropical Diseases shortly to be established at Townsville, North Queensland.

PLANS for a new Norwegian polar expedition were described by Captain Amundsen at a large meeting of the Geographical Society held at Christiania on November 10, and attended by the King of Norway. Captain Amundsen's plan is to go with Dr. Nansen's old ship the *Fram* to Cape Barrow, the northernmost point of Alaska, and thence north. The ship will drift with the ice across the Polar ocean. The voyage is expected to last five years.

THE National Conservation Commission will hold its first full meeting at Washington on December 1. At that meeting the first steps will be taken toward putting into tangible shape the results of the six months' inventory of the country's waters, forests, lands and minerals. One week later, after the commission has gone over the inventory, it will hold a joint meeting in Washington with the governors of the states and territories, or their representatives. At this meeting the inventory will be further discussed and the report which the president has requested the commission to make to him by January 1, will be formulated.

ACCORDING to a press despatch, the International Institute of Agriculture, which was proposed by Mr. David Lubin, of San Francisco, to King Victor Emmanuel, inaugurated its labors in Rome, on November 16, by a meeting attended by delegates from forty-six of the countries that have signified their participation. A plan of organization has been prepared, and this, together with a budget, was submitted to a general meeting on November 26. The United States is represented by Ambassador Griscom, Mr. David Lubin, Dr. C. C. Clark, Mr. W. F. Hill, Mr. G. K. Holms and Mr. William Stuart. After the speech by the president, Senator Faina, Mr. Lubin delivered an address in which he outlined the constitution of the institute.

THE daily papers state that Dr. Alexander Graham Bell has completed the frame of his new aerodrome. The *Cygnét*, which made a successful ascent last year with the late Lieutenant Selfridge as aviator, was composed of 3,393 tetrahedrons, while the new aerodrome, constructed on practically the same lines, will have 5,000 tetrahedral cells. It is said to be the intention of Dr. Bell to make a trial flight the first week in December. It is planned to place the machine on a platform holding between two motor boats. They will run up into the outer Bras d'or Lake, and when a speed of eighteen knots has been attained, the aerodrome will be released. Mr. W. F. Baldwin, chief of laboratories for Dr. Bell, is reported to have said that the experimental bureau at Hammondsport, N. Y., is about to make experiments on Lake Keuka, where an

airship will be propelled by its own motors over the surface of the water to get sufficient speed to expand its wings. The machine will be attached to light canoes, which will be carried by the airship as it leaves the water on its flight.

FOREIGN papers state that M. Barthou, the French minister of public works, announced in the senate on November 5 that the sum of £4,000 is to be devoted by his department to the encouragement of aerial locomotion. The International Sporting Club, of Monaco, has offered the sum of £4,000 to be competed for at an international aeronautical meeting to be held at Monaco from January 24 to March 24, 1909. The length of the course will be about six miles. The first prize will be £3,000. On November 6 an inaugural meeting of the new Aeroplane Club was held in London, when it was decided to form a club devoted to the development of aerial navigation by machines heavier than air.

PUBLIC lectures in the department of chemistry, College of the City of New York, have been arranged for the current session as follows:

November 20—Professor Bradley Stoughton.  
December 4—Dr. Wm. McMurtrie.  
December 11—Dr. A. von Isakovics.  
January 8—Professor V. Coblenz.  
January 15—Professor M. Loeb.  
February 19—Dr. R. W. Moore.  
February 26—Mr. M. Toch.  
March 5—Dr. A. P. Hallock.  
March 12—Professor A. B. Lamb.  
March 19—Dr. Harvey W. Wiley.  
March 26—Dr. H. S. Miner.  
April 2—Dr. Wm. J. Schieffelin.  
April 23—Dr. M. Wallerstein.

THE department of archeology, Phillips Academy, announces the following free lectures to be delivered in the lecture hall of the archeology building at 8 o'clock.

October 27—"Games of the American Indians," Warren K. Moorehead.

November 17—"Five American Nations; Conquerors of the Snow, Forest, Mist, Desert and Plains," Professor Harlan I. Smith.

December 8—"The White Races," Charles Peabody.

January 12—"The Metal Ages," Charles Peabody.

January 26—"Lewis and Clark Expedition to the Head of the Columbia," Warren K. Moorehead.

February 9—"Lewis and Clark Expedition to the Pacific," Warren K. Moorehead.

February 23—"Caves at Home and Abroad," Charles Peabody.

March 9—"Social Life of the American Indians," Warren K. Moorehead.

March 23—"Lake Dwellings and the Bronze and Iron Cultures," Charles Peabody.

April 13—"Origin, Accomplishments and Destiny of the American Indians," Warren K. Moorehead.

#### UNIVERSITY AND EDUCATIONAL NEWS

At the annual Michigan Union banquet at the University of Michigan Mr. Clarence W. Barbour, representing the Michigan alumni in New York, announced that plans had been perfected and funds subscribed for the erection of a \$300,000 dormitory, with a large "commons."

THE H. K. CUSHING Laboratory of Experimental Medicine at Western Reserve University was dedicated on the afternoon of November 20, when Dr. H. W. Welch, of the Johns Hopkins Medical School, made the principal address. The building, complete in all its appointments, is of reinforced concrete, faced with brick. It is 55 × 40 feet, and consists of four floors. On the first floor is a large room for chemical work, and in connection with this is a balance room, the balances being arranged on a solid concrete pier. A workshop, a store room, a dark room for photographic purposes, and for the reception of a centrifugal, complete the accommodation on the first floor. On the second floor is the library, and one large and several small rooms for individual investigations. Also, a refrigerator room, a room for maintaining a constant temperature and a chemical store room. The third floor has several rooms for students, and the fourth rooms for the study of nutrition in animals under the influence of different diets, with a view to throwing light on the diseases of nutrition in man. The building is practically fireproof. The laboratory is named for Dr. H. K. Cushing, who was for many years associated with the Cleveland Medical College, which later became the medi-

cal department of Western Reserve University. Dr. George N. Stewart is professor of experimental medicine and director of the laboratory.

THE Rev. Dr. W. A. Shanklin, president of Upper Iowa University, has been elected president of Wesleyan University.

DR. FREDERIC E. FARRINGTON, who spent last year in France, studying especially the secondary schools of that country, goes this year from the University of California to the department of education in the University of Texas. In the latter institution he occupies the newly-established chair of associate professor of education in charge of the observation and practise of teaching.

DR. STANLEY R. BENEDICT, formerly assistant in physiological chemistry at Yale University, has been appointed instructor at Syracuse University.

HOWARD LANE BLACKWELL, Ph.D., has been appointed fellow for research in physics at Harvard University.

#### DISCUSSION AND CORRESPONDENCE

##### SIDE ISSUES BEARING ON THE AGE OF NIAGARA FALLS

IN a late issue of SCIENCE (July 31, 1908), a notice of my recent book upon Niagara Falls was published by Dr. G. K. Gilbert,<sup>1</sup> which is chiefly a discussion of three minor problems, the treatment of which could scarcely be considered a necessary digression from the main issue of my book. In his dealing with these, a doubt is left as to the correctness of my conclusions regarding the age of Niagara Falls; and a substitution is given in his own behalf, announcing, without the evidence, that their duration is more than four times that of my computation, which computation was based upon the most carefully measured details of the work accomplished during each stage of the physical changes of the river. This correspondence is cordially welcomed in that it renews the interest in the subject, for as Professor James Geikie has

<sup>1</sup> "Evolution of the Falls of Niagara," by J. W. Spencer, pp. i-xxx, 1-490, Geological Survey of Canada, 1907.